

XXXI.—*On the Birds of Zululand, founded on the Collections made by Messrs. R. B. and J. D. S. Woodward.*
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 a Narrative of their Travels,* by R. B. and J. D. S.
 WOODWARD.

(Plate X.)

THE brothers Woodward, of Hlati Kula, Ubombo, for the last three years have devoted their energies to the exploration of Zululand, and the list of species of the birds of which they have obtained specimens has been prepared from the collections that they have sent to England from time to time. As will be seen from the account of their journeys, the travellers have traversed a large tract of country, and have enlarged our views as to the ranges of several species, while the discovery of a new Barbet, allied to an East-African species, is of great interest, and the occurrence in Zululand of *Turacus livingstonii* and *Nicator gularis*, species hitherto believed to be confined to the Zambesi district, are also facts of importance.

The following narrative, drawn up by the collectors themselves, gives an excellent idea of the nature of the country in Zululand and of the most characteristic features of its bird-life.

*Description of our Journeys in Zululand, with Notes on its
 Birds.* By R. B. and J. D. S. WOODWARD.

As we have always taken pleasure in the study of ornithology, both in Africa and America, we think the following short account of our travels in Zululand may interest the readers of 'The Ibis,' and give them some idea of the birds to be met with in that country.

Having provided ourselves with a spring cart large enough to sleep in at night, a pair of horses, and a Kafir boy, also guns, ammunition, &c., we arrived at the Tugela river, which bounds Natal on the north side, and crossed into Zululand on the 14th July, 1894. The Tugela river is wide, and often

impassable, but the Government have provided a flat-bottomed "punt," in which a cart and horses or a waggon and oxen can be easily conveyed across by means of a wire rope suspended from bank to bank. After having passed through so much bush-land along the coasts of Natal, the bare hills on the Zulu side did not look so inviting. Proceeding on our journey we came to the Inyoni flats and encamped near a small stream where there are a few mimosa-thorns. In these we found some pretty Honey-suckers, black with scarlet breasts (*Cinnyris gutturalis*). Here we rested for the Sunday, and next day crossed the river Amatikulu, where the horses had heavy work to draw the cart through the deep sandy drift. There are some white farmers settled near this stream, a few men who secured farms from the chief before the country was annexed by the British Government.

The air has a frosty feel at night now, this being mid-winter. Leaving the main road we called at the residence of chief John Dunn, a nice house enclosed in a plantation of Australian blue guns. Near here we saw a number of fine Paauw (Bustard), which is the largest and best game bird in South Africa; but, strange to say, many of the Boers have a prejudice against the meat and will not eat it. We reached the sea-side at the mouth of the Inlalaas river, where there is a large lagoon, a beautiful sheet of water, where the storekeeper keeps a boat and supplies Eschowe with good fish in the summer. The sandy hills here are covered with thick low bush, in which we secured a number of birds. There are a good many swamps here, which make it unhealthy during the greater part of the year. The marshes are frequented by different sorts of Waterfowl. It was some time before we could make out what caused the peculiar guttural sounds that issued from amongst the reeds; but by careful watching we discovered that it was made by a species of Water-hen (*Limnocorax niger*), and we afterwards shot some specimens of it. A Reed-bird (*Catrisicus apicalis*) here warbles cheerfully, as it runs up and down the stalks. The Black-and-White Kingfisher (*Ceryle rudis*) is common;

this bird, unlike the rest of its tribe, has the hawk-like habit of hovering over the water before pouncing down on its prey. The scarlet blossoms of the aloe and the Kafir-boom (*Erythrina*) attracted numbers of the *Nectariniidæ*, one species of which (*Cinnyris verreauxi*) we had not met with before. As it flits about it displays to advantage its scarlet side-tufts, which set off its otherwise sombre plumage. Another little bird that was new to us was the Yellow-and-Black Barbet (*Barbatula bilineata*), also a small Crab-eater (*Haleyon orientalis*), very similar in plumage to the common *Haleyon albiventris*, but with notes altogether different. The chattering Yellow-breasted Bulbul (*Criniger flaviventris*) was also very common here, as was the Black-and-White Barbet (*Smilorhis leucotis*), which seems to confine itself to the coast-lands, as we have not yet met with it up country.

After remaining here for two weeks we returned to the main road, and leaving the flat country, and passing over a number of low hills with good grass for cattle, reached a large store situated at the nearest accessible point to the Ungoye forest, which we were anxious to visit. Mr. Green deals almost entirely in Kafir goods; but all the store-keepers have to keep accommodation for travellers, and we found them most useful in our journeys. We left our cart here and rode on to the forest about four miles off, Kafir bearers carrying our things. It was a rough native path mostly uphill, till we reached a pretty spot on a high grassy terrace surrounded by dense bush which covered the hills and valleys on three sides. In front of this site was an extensive view of the lower country bounded by the Indian Ocean. A quick-flowing mountain stream supplied us with excellent water, and altogether this seemed such an interesting locality for a naturalist that we decided to build a hut here and remain for some little time.

This forest is the largest in Zululand, being 15 miles long and about 5 broad, and covers a large portion of a range of hills which bounds the coast-lands. Beyond the bush are some rocky heights, to which we made an excursion, and climbing to the top could trace the windings of the Umhla-

toosi river, which about two miles from its mouth forms a lake of considerable size. Amongst these rocks are often found the graceful little klipspringer (*Oreotragus saltator*). It has a beautiful thick grey fur and large eyes, and we have seen it very tame in confinement. Rock rabbits (*Hyrax capensis*) are very numerous here; we have kept these animals in boxes, but they don't seem to get very tame. The Cape "jumping hare" (*Pedetes caffer*), the "Itenashi" of the Kafirs, and large troops of baboons, as well as a few leopards, are found here. The latter we often heard roaring during the winter nights when they were in pursuit of their prey.

There was a large roosting-place of the "Hadidah" or Hagedash Ibis (*Geronticus hagedash*), near our encampment, and when we were short of meat we had only to go there after dark and shoot a brace. This bird derives its name from its peculiar cry of "ha-ha-hadadah," with which it makes the woods resound. Its voice can be heard a long distance off, and harmonizes well with the grand scenery amongst which it dwells. They assemble in small flocks along most of the rivers, but used to be more common in Natal than they are now: we have seen as many as fifty birds roosting on one or two trees overhanging the Ifafa river. The flesh of the Hadidah is excellent eating, and it certainly ought to be protected during the breeding-season. One safeguard this bird has is that the natives will not touch its flesh. When taken young this Ibis can be easily tamed: we have had them walking about the place quite content amongst the poultry, but as they grow old they are apt to wander unless confined. We fed them on meal, bread, &c., although in their wild state they appear to live entirely on insects and reptiles. At the breeding-season they separate and go in pairs, making a large nest of sticks, in which they lay from three to five eggs. When plucked this bird is less than a duck in size; but its long neck and wings give it the appearance of a much larger bird.

We did not find a great variety of bush-birds here. The Lourie or Touracou, so common in Natal, is scarce here, as

the Zulus kill them for the sake of their red wing-feathers, which they use for decorating their head-dresses. Flocks of Levaillant's Parrot (*Pæocephalus robustus*) used often to fly screaming overhead, and sometimes alighted on the tall trees, but would not let us approach near enough for a shot. These Parrots, like the rest of their tribe, are gregarious in their habits, and congregate in large numbers in the upper districts of Natal, but we have sometimes seen them in the coast-lands. They sit quietly during the day, but as evening draws on they fly out in search of food, making the woods resound with their shrill cries. These birds can be taught to talk well. A farmer having kept a pair of these Parrots for some time confined in a cage, gave them their liberty, on which, instead of leaving, they took possession of an old pigeon-house, where they laid their eggs and reared their young: they remained for two seasons, and used to fly in at the sitting-room window to be fed. The young birds as soon as they were fledged left for the woods.

Here we were fortunate enough to discover a new Barbet, to which Capt. Shelley has affixed our name*. We heard its peculiar cry of "chop-chop" some time before we were able to find out what bird made it, as it keeps in the thicker parts of the woods and feeds on berries. The notes of all the Barbets are peculiar: the little Red-crowned Barbet (*Barbatula pusilla*) which is found here breaks the stillness of the woods during the hot hours of mid-day with its monotonous and incessant note, from the metallic sound of which it is well-named the "Little Tinker." This bird, though so common, is not often seen because of its shyness, and perhaps also because it possesses ventriloquous powers. Sometimes the sound seems to come from a bush quite near, and yet no bird is visible, and at other times it is hard to tell from what quarter the sound proceeds.

We took a long ride one day down to the low country and were caught in very heavy rain and had to sleep out; and not having a tent with us, we spent, as may be supposed, a disagreeable night. Having shot a Kingfisher (*Halcyon*

* *Stactolema woodwardi*, of which a figure is given, Plate X.



J.G. Keulemans lith

STACTOLÆMA WESTERDORFII

Stactolæma Westerdorffii

orientalis) which was new to us, we were glad to hasten back to our encampment early next morning.

Besides our new Barbet and the "Tinker," was found here the Red-fronted Barbet (*Pogonorrhynchus torquatus*), a handsome bird, which is very familiar in the bush-country. It is bold and fearless and may often be seen seeking for insects in the gardens round the farmhouses. Like the Woodpeckers, it makes round holes in the trunks of dry trees, where we have found its white eggs, three or four in number. It ought to make a nice cage-bird with its gay plumage, as it is not particular in its diet and feeds on fruits and berries as well as on insects. Amongst the commonest of the birds here were Starlings: the prettiest we have met anywhere is the Green Starling (*Lamprocolius phænicopterus*). The glossy plumage of this bird, which glistens resplendently in the rays of the sun, and its bright orange eyes, together with its lively and cheerful habits, makes it one of the most striking of South-African birds. We kept one of them that we reared from the nest for a long time. It was quite happy in confinement, and would even come down from its perch and alight on the hand in a playful manner. It was a good songster with quite a variety of notes, and would sometimes even enliven the night with a cheerful air. It ate almost anything, but was particularly fond of white ants, which it knocked out of the clay with a sharp blow of its bill. These Starlings fly about in large flocks during the winter season when the berries are ripe, and perching on the branches of a tall tree keep up a lively chorus. The eggs, which are bluish in colour, are laid in the hole of a tree well lined with feathers. We have noticed a peculiarity in the eyes of these birds: when young they are blue like most fledglings, but soon change to a milky white, and remain this colour for nearly a year, when they change again to the bright orange of the adult bird. Smaller than this bird and more distinctly blue in colour is the *Lamprocolius melanogaster*. Its habits are much the same, but it confines itself more to the bush and does not go about in such large flocks. It is a fair songster, and its notes are loud and musical. The

Red-winged Starling (*Amydrus morio*) is a large bird, strong on the wing, and generally flies high; it frequents the neighbourhood of rocks and kranzes, in the holes of which it builds. These Starlings are very sociable and even during the breeding-season do not separate, but lay their blue speckled eggs in convenient crevices of the same cliff. They are very noisy, and, although unable to sing, keep up a constant chattering when they alight. We have taken the young birds from the nest and were surprised to notice how different their plumage was from that of the old birds, being speckled like that of the English Starling. They seem to be very fond of the rock-plum, which grows plentifully near their nesting-places.

Owls are common here, as in most of the thick bushes. Although most people seem to have a sort of superstitious dislike to the cry of the owl, its loud hooting as it breaks the silence of the night is often listened to with pleasure. Out here there are no old ruins with ivy-clad walls, the favourite haunts of these birds in the old country, but decayed old trees in the deep recesses of the forest are often inhabited by a pair, who there deposit their round, white, rough-shelled eggs (which are everywhere the same, only varying in size), and rear undisturbed their venerable-looking offspring. We have kept the handsome *Bubo capensis* tame, reared from a nestling; when fully grown it hoots as loud as its wild relations. *Bubo maculosus* is also a fine bird and its soft "hoo-hoo" breaks the stillness of the moonlight nights. We obtained its eggs, which are four in number, taken out of a hole in a bank. A friend of ours told us that these Owls made considerable havoc amongst his pigeons, entering the dove-cot at night and extracting the birds. We hardly believed this, but one night a tame owl of ours escaped from its cage, and entering a barn tore off the heads of two of our doves! This, however, is quite an exception to the general rule, and owls should be classed amongst the most useful of vermin-destroyers.

Another common species is the Swamp Owl (*Asio capensis*). This is exclusively a grass bird and keeps to the open veldt.

We have met with it in considerable flocks in spots where the grass grows rank ; when disturbed they rise with a harsh screeching, and alight some yards further off. Their long legs enable them to capture their prey amongst the reeds and tall grass which they frequent. *Strix flammea*, the common White Owl of South Africa, has a peculiar "hoot" of its own, very different from the screech of the home species.

The *Trogon narina* is abundant in the Ungoye, and its gaudy plumage reminded us of tropical America, where so many Trogons are found. The favourite haunt of the Trogon is the darkest parts of the forest, where it safely flits from bough to bough. In the nesting-season it keeps up almost incessantly a loud, monotonous, and mournful note during the mid-day hours. Often when one is walking quietly in the bush, this bird will alight on a branch close by, where, sitting motionless, it displays its gorgeous plumage, until, catching sight of you, it disappears like a flash amidst the thick foliage. We have more than once come across their nests : they lay three or four white eggs, about the size and appearance of a pigeon's, in the hole of a tree. The young birds when they first get their feathers are strange mottled little things, not at all pretty ; they are very delicate, and it seems almost impossible to raise them from the nest. We have often seen these birds catching butterflies on the wing like Flycatchers, and have found beetles and caterpillars in their stomachs. The feathers adhere loosely to the skin, and it requires great care to make a good specimen for the cabinet.

Having heard that there was little chance of our being able to keep horses long in the low country on account of the horse-sickness so prevalent there, we cut a good hardwood desselboom, or pole, to take the place of the shafts and bought four large oxen for our cart. Having secured a driver and forelooper (leader), we left the Ungoye and trekked back along the main road until we came to the point where it is joined by the road which leads up country to Eschowe.

To shorten our journey we took a by-road, but found it

very rough, and when we were going down a steep descent to cross a small stream one of the wheels ran into a deep hole, which caused the cart to capsize. Fortunately there were some men near who gave us their assistance, and after off-loading we managed to right it, but the tent-frame was broken in two places. Proceeding on our way and gradually ascending to higher country, we passed through a beautifully green veldt studded with flowers of every hue. As the road neared the bushy kloofs, we heard the cheerful notes of *Laniarius quadricolor*. This, a beautiful Shrike, is of four colours, and its scarlet throat makes it very conspicuous in the thickets. It does not sing, but its cheerful cry of "kong-kong-koit" is one of the pleasantest of the spring sounds. The female is similar in plumage to the male, but the scarlet and black bands are not so well-defined.

Eschowe is situated on high land commanding an extensive view of the surrounding country. Thick woods clothe the valleys about it, making it a pretty site. It is healthy but sometimes very cold, being 2700 feet above sea-level. It is a good place for butterflies, and we caught some during the short time we were there. After leaving Eschowe we crossed the Inlalaas, which is quite a small stream up here; on its banks there is a water-mill for grinding corn for the supply of the town. After travelling a few miles further on we came to a point from which we had a grand view of the Umhlatoosi valley about 1000 feet below, the large flats on either bank being thickly covered with mimosa thorn trees. The windings of the river could be traced for many miles down, and on the far side rose steep hills and rocky precipices intersected by many a wooded kloof. On one of the high points in the distance could be discerned some of the buildings of St. Paul's Church of England Mission, and here and there the hill-sides were dotted with clusters of native kraals with their bee-hive-shaped huts. We found good camping-ground under a huge *Euphorbia*.

This spot, which is on the highlands over the valley of the Umhlatoosi, is about 12 miles from Eschowe. We chose it

as being a convenient centre from which to prosecute our search for birds. It was within easy walking distance of the low flats, where there is plenty of cover for birds amongst the thorns and in the bushy kloofs. Our rule was to rise and get tea at 5 o'clock, and make an early start for the valley with guns and nets, employing the hotter parts of the day in preserving what we had collected. This being the month of October, the spring of the year, we heard a great variety of bird-notes. Here we first met the elegant Long-tailed Turtle-Dove (*Æna capensis*). These lovely little birds are generally seen in pairs about Kafir kraals, searching for grains of corn, or picking up grass-seeds on the road-sides. The Collared Turtle-Doves (*Turtur vinaceus* and *T. semitorquatus*) are the commonest members of the Pigeon tribe found in this country. They are seen everywhere where there is any cover for them, and the loud and cheerful cooing of the larger species, *T. vinaceus*, is liked by everyone. They devour a considerable quantity of grain during the planting-season, but there would not be so much loss if care was taken to plant the seed deeper.

Bee-eaters are very common here: they are especially partial to hot sheltered valleys. We obtained specimens of two species, *Merops bullockoides* and *Merops pusillus*. These birds take their prey, consisting of bees, wasps, gnats, and other insects, on the wing, like the Flycatchers. The skin is thick, like that of the Honey-guide, no doubt to protect them from stings. Several of the trees were covered with blossoms which attracted a number of Honey-suckers. The splendid Long-tailed Honey-sucker (*Nectarinia famosa*), with its golden-green plumage, frequents the localities where sugar-bushes (*Protea mellifera*) grow, in the large flowers of which they find their favourite food. They make a whistling cry as they chase one another from bush to bush, and the male has a short song. The Red-breasted Honey-sucker is one of our most familiar sun-birds and a frequent visitor to the flower-beds, where it extracts nectar from the blossoms as it flits in the sunshine and displays the gay colours of its plumage. It has a cheerful little song. The Black Honey-

sucker (*Nectarinia amethystina*) is very partial to the mistletoes and other flowering parasites that grow on the mimosa-trees. It is of a very pugnacious disposition. We have found several of their nests hanging from low trees; these are domed and loosely put together, composed of grass, dead leaves, and cobweb: the eggs are yellowish white.

A very handsome Honey-sucker is the *Cinnyris gutturalis*, its bright scarlet chest set off by its dark general colour. It is abundant here amongst the aloe-blossoms.

Three glossy Cuckoos are found here, and their spring call-notes are easily distinguishable from one another. The Emerald Cuckoo (*Chalcites smaragdineus*) is considered the most lovely of all the Cuckoo tribe. During the months of October and November its well-known pleasing call sounds from all the kloofs and bushes. The female is not so often met with as the male, but we obtained an egg, which is white. The Golden Cuckoo (*Chalcites auratus*) prefers the thorn-trees, and we heard its soft *di-di-didric* continually. The large Red-chested Cuckoo (*Cuculus solitarius*), from its markings, might be mistaken at first sight for a Hawk. Its loud call-note, which, in the spring-time, resounds through the woodlands, resembles the words "whip-whip-whip," and it never seems to get tired of repeating it. The Black Cuckoo (*Cuculus clamosus*) utters its loud monotonous cry when perched on the top of some tall tree in the heart of the kloofs. When two birds meet they greet each other with a peculiar chattering not unlike that of the Red-billed Hoopoe.

In the "mealie-gardens" here were flocks of Kafir Finches (*Vidua ardens*), two or three males accompanied by a number of brown females. We found a nest in a clump of tall grass, fastened to the stalks; it was a small domed structure, composed of fine grass, and contained little white speckled eggs. The larger Kafir Finch (*Chera progné*), called by the Kafirs "Isakabula," we met with on the highlands. Its enormous tail is rather cumbersome and causes it often to fall a victim to the sticks of the boys, who are fond of decorating themselves with its feathers. The very elegant Whydah Finch (*Vidua verreauxi*) we saw here

for the first time; its tail is curiously arched and looks well as it floats from tree to tree. It feeds largely on grass-seeds. The little Waxbills were numerous here; they are called "Roibeks," from the pretty red bills that most of them have. The King of the Red-bills (*Vidua principalis*) during the breeding-season has a long tail which makes him very conspicuous as he flies with an undulating motion over the flats or sits perched by himself on the topmost twig of a low tree whistling his few notes. We found the nest and eggs of *Estrelida incana*; it was built in a small tree in the open land, and was very loosely made of grass, lined with fowls' feathers. It contained six very small white eggs.

The Cape Canary (*Serinus canicollis*) was common here; it is well known throughout the country for its sprightly habits and cheerful song. It makes a nice cage-bird, and even breeds with the imported canary, producing a pretty mule. The "Mealie-bird" (*Crithagra ictera*) abounds everywhere where there are Kafir mealie-gardens, *i. e.* patches of Indian corn, and when the grain begins to ripen it has to be carefully tended by the children to protect it from the depredations of this and other small birds. Its nest is cup-shaped and placed in the fork of a low tree; and the eggs are white, slightly blotched with brown, and tapering at one end. There were a few Wrynecks (*Iyna pectoralis*) in the open park-like country on these highlands. This bird flies from tree to tree, making a harsh chattering cry, which has sometimes been mistaken for that of a Hawk. It has a peculiar habit of cocking up its tail as it creeps up the trunks of the trees; this is necessary to protect it from being injured by contact with the rough bark, as, unlike that of the Woodpecker, the tail is composed of ordinary soft feathers. Its plumage reminds one of the Nightjar; it has red-brown eyes.

The Yellow-breasted Lark (*Macronyx striolatus*) is common everywhere. It is naturally very tame: boys knock over numbers of them with their sticks, and grass-fires are apt to destroy their nests. The Orange-throated Ma-

cronyx capensis is the finest of our Larks, and, although it cannot sing, it has a pleasant cry, which it utters as it stands on the top of a white-ant heap, or takes its short flight from one low bush or ants' nest to another.

There are plenty of Crows about here. The Ring-neck Crow (*Corvus albicollis*), the Carrion-Crow of South Africa, is constantly met with on the roads, where it frequents the vicinity of the outspans in the hope of picking up a meal. It is also the constant companion of the Vulture, and helps in demolishing the carcass of a dead ox or horse. It seems to have a special partiality for eggs, which sometimes causes it to come to an untimely end by the farmer's gun. It is remarkable how easily these birds can carry off such a slippery object as a hen's egg without cracking it—they sometimes carry one more than a mile before they alight. However, they do more good than harm, and well pay for their occasional depredations. One year our farm was visited by myriads of green caterpillars, which consumed the young grass as soon as it sprouted, and for a time made the hill-sides quite bare of pasture, and it would have been a bad look-out for the cattle had not a large flock of these Crows appeared upon the scene and remained until they had cleared the ground of this pest. They do not seem to resort to vegetable food often in their wild state, and do no harm, so far as we know, to the crops. The young are easily reared, and we have had them walking about the place quite tame. One which we kept for a long time used to roost with the fowls, to some of which it seemed quite friendly, but it occasionally had furious battles with the cocks, which always ended with the discomfiture of the fowl. These Crows, unlike the black species, build in the kranses, and lay two or three large eggs, green, spotted and speckled with brown.

The Cornland Crow (*Corvus capensis*) takes the place of the Rook in England, but is a larger bird. It is gregarious, and when large flocks alight in a field of corn they do considerable damage, but, on the other hand, they destroy numbers of grubs, locusts, and other insects. The young birds are not easy to rear; they get a disease or weakness of

the legs, and soon die. This Crow has a variety of notes, and is often seen perched upon a dead branch croaking to itself: it is said to be capable of being taught to talk. It separates into pairs during the breeding-season, and makes a large nest of sticks in a water-boom or other tree, which it uses year after year.

One of the most beautiful of South-African birds that we had not hitherto come across was the "Glossy Thrush" (*Pholidauges verreauxi*). It is one of the Glossy Starlings, and flies high, going about in small flocks. Its lovely violet colour, with snow-white belly, makes it very striking. The female is very different in plumage, being a brown-spotted bird. The iris is yellow.

After a sojourn of three months near the valley of the Umhlatoosi we left: returning to Eschowe we spent a few days butterfly-collecting and visiting, and then, having taken in a new stock of provisions in our cart, and having had the latter repaired and the axle lengthened, we started for the Umfolosi. The road crosses the Umhlatoosi at a point higher up than that where we had been previously; the valley here was very dry, and grass for the oxen was rather scarce. The drift is good, a weir having been made across, and near by is a roadside house for travellers. We rested here for Sunday: this was an exceedingly hot day—the hottest we have had this summer (Jan. 27), and was followed by a hot night; but we have reason to be thankful that these latter do not occur often, as they are so enervating. On the far side of the river the country rises very abruptly, and we had to ascend by a long and steep pull, almost too much for the oxen. Arrived at the top, we outspanned near a Swedish Mission Station. We were now amongst high grassy hills bare and bleak, and if it had not been for the hospitality of Mr. Fristed, we should have been badly off in such an exposed situation, as a thick, cold, misty rain came on, making the roads slippery and impassable for a day or two. Elevated though this country is, horses do not thrive here on account of the rankness of the grass. Our next halting-place was Melmoth, a small village situated in the open

veldt, where we obtained from the Resident Magistrate a permit to shoot in his district.

Leaving these high lands, we gradually descended into the low thorn veldt, and arrived in the evening at a very dry spot, where we outspanned amidst the aloes and euphorbias, and had to send a long way for water. Next day we inspanned at 6 o'clock, and went down to the valley of the White Umfolosi, and rested for lunch under one of the large trees that grow on its banks. This being a hot day, we enjoyed a bath in this fine river. In the evening we crossed over by the broad sandy drift by taking off part of the load and sending the cart back for it. In this district we found a number of birds that we had not seen elsewhere. This spot is in the midst of a wide stretch of thorn country, through which the White Umfolosi and its numerous tributaries flow. The stream below us is called the "Siza," and a little further off is the Tegwen, the junction of which was a favourite resort of Guinea-fowl. The trees are mostly mimosa or acacia, some of which have fine spreading branches, and look not unlike the cedar of Lebanon. These trees grow either singly or form thick clumps, amongst which are many beautiful park-like glades much frequented by Rollers, Hornbills, and Grey Louries.

The Roller (*Coracias caudata*) is a splendid bird. It ornaments with its brilliant plumage the open pastures dotted with trees, amongst which it flies with its peculiar rolling gait. It is not very common, and is so shy that we have had some difficulty in procuring specimens. It has a harsh grating cry, which it utters when disturbed. Its food is insects, which it hunts in the air or on the ground, and is said to toss up and catch before swallowing.

We shot here a specimen of the Milky Eagle-Owl (*Bubo lacteus*), which is the largest of our Owls: it measures 2 feet in length, and has a stretch of wing of 4 feet 6 inches. It has black eyes. We found the remains of a Dove in its crop. What a contrast this giant Owl is to the *Carine perlata* which we obtained in the same place! This little Owl, which measures only 7 inches, does not hoot or screech,

but has a peculiar whistle, which it utters in the evening and early morning. It seems to confine itself to the mimosa-thorns, lives on insects, and does not much object to the sunshine.

The Umfolosi seems to be the southern limit of the small green Parrot (*Pæocephalus fuscicapillus*). Kingfishers and Crab-eaters were plentiful: here also we often heard the pleasant shrill whirring notes of *Halcyon cyanoleuca*, and admired its lovely blue plumage. The pretty little Natal Crab-eater (*Ispidina natalensis*) was plentiful. A native brought us one of these birds which he had caught on its nest made in the side of an antbear's hole. It was a male bird in perfect plumage, and probably both sexes take part in the work of nidification. The female Kingfisher, unlike other birds, remains fat during the period of incubation. *Halcyon fuscicapilla* is common everywhere. It is very fond of crabs. We once kept a pair of these birds for several months in a large cage, and they throve well on finely-cut meat. They are quite hardy, and easy to keep if supplied with plenty of water for bathing. The egg is perfectly round, an inch in diameter, and looks as if it had been cut out of smooth white marble. We found its hole in the bank of the river; it was well lined with bones and remains of insects. It is amusing to watch these birds as they sit on a branch, nodding their heads whilst they give utterance to their few loud shrill notes. The Blue Kingfisher (*Alcedo semitorquata*) flies rapidly up and down most of the rivers within a foot or two of the water. It lives entirely on fishes, and never quits the bed of the stream. We have watched with pleasure the old birds catching fishes for their young ones, which were perched upon a rock screaming lustily for food.

The Great Kingfisher (*Ceryle maxima*) is the largest of its tribe, being 15 inches in length. It reminded us of the Belted Kingfisher of America (*C. alcyon*), which it much resembles. It is by far the most noisy of all the Kingfishers, and, when flying, keeps up an incessant loud chattering scream. With its large strong bill it swallows fishes of a considerable size. The "Hammer Kop" (*Scopus umbretta*)

hunts along most of the river-courses, where it feeds upon the frogs, reptiles, and insects that it finds there. It is a strange solitary bird, nearly allied to the Herons. The nest is a huge domed structure made of sticks.

Towards the end of February, having got all we could here, we inspanned our oxen and started for the Umbe-gamusa, a tributary of the Black Umfolosi, which we were told was a good place for birds. The road was stony and in some spots in very bad order, and some of the spokes of the cart-wheels came to pieces. After a journey up and down some steep hills of about 20 miles we reached the river, and, crossing, camped on the opposite bank. This was a beautiful district, the flats and hill-slopes covered with large thorn-trees and tall rank grass; but it has the reputation of being unhealthy. We spent some weeks here and at the Black Umfolosi, and got a few birds and insects, but could not obtain the number and variety in this district that we did at the Umhlatosi and on the White Umfolosi.

Oxpeckers (*Buphaga*) were numerous here and were a great nuisance to one of the beasts who had a bad sore. Though we shot many, others came, and alighting on the back of the ox, and pecking with their peculiar blunt-pointed bills, prevented the sore from healing. These birds, though they do occasional mischief, destroy multitudes of ticks which creep up upon the cattle from the grass and keep them in bad condition by sucking their blood. In this work they are most indefatigable, and are hardly ever seen away from the cattle except when they fly from one herd to another. The cow seems to recognize the Oxpecker as her friend, rather encouraging its attentions than otherwise. When disturbed the bird sets up a harsh screaming and flies away high overhead.

Guinea-fowl are abundant here, but are more often heard than seen, as they keep to the long grass, which makes stalking them very difficult. The Bush-Partridge (*Franco-linus natalensis*) is common in the woods and thickets, and its pleasant evening call-note is heard continually. It seems to favour most the neighbourhood of kraals and homesteads,

as Dr. Livingstone noted when he said that "the screaming of the Francolin proclaims man to be near." Though it is a wary bird, it may be shot by remaining secreted near its haunts in the evening when it comes out to feed. When it comes near it makes a curious low cry, which is misleading, as it sounds as if it proceeded from a distance, and if the watcher then betrays his presence he loses his chance of bagging his game. This bird is called "Tuquali" by the Kafirs, and it consumes a considerable quantity of their grain.

The common Partridge that frequents the open grass-land is *Francolinus subtorquatus*. It becomes very tame in the winter season, even coming into the verandah of the house and picking up crumbs. We have obtained their eggs, which are pure white, laid in the long grass. This Partridge measures 10 inches, being 3 inches shorter than the preceding species.

Leaving this place, we crossed the Black Umfolosi at its drift, which is low at this season, but swift and treacherous after rains. After rest and coffee on its far banks, we journeyed on through a country covered with small trees to a store on the Ivuna, and early next day ascended to the high lands of the Nongoma district. Here we saw several Koran (*Otis afra*), but they seemed wary and kept at a distance. The shadows beginning to fall, we outspanned and spent the night on this open veldt. Our way continued over bare country, until, descending to a lower level, we soon came to a halt at the Church of England Station, superintended by the veteran missionary Mr. Robertson. Beyond this there was no regular road, and it was difficult to keep to the track; but our driver, saying that he was acquainted with the country, took us down a very steep hill, where we had considerable difficulty in preventing the cart from capsizing. After proceeding for some distance along a winding valley over broken and rough ground, the man confessed that he had lost his way, and we had to make our way back as best we could, climbing an almost perpendicular hill. If the little oxen had not been sure-footed and the chain strong, the cart and its contents would have been dashed to pieces

below. Thankful we were when we got into the proper track again and sighted the grand mountain Edukumbaan, near which we proposed to encamp. Next morning we found ourselves on the top of a ridge on the lee-side of a wood, where we obtained beautiful views of the deep valleys, many of them thickly clothed with timber. This district is called the "Hlwati," and is within the Hlabisa magistracy. Although we stopped here for some time we saw very few birds; but the abundance of flowers attracted a large number of butterflies, of which we obtained a nice collection.

As the season was now well advanced and sufficiently healthy, we decided to go down into the low country, and consulted with a neighbouring storekeeper as to the best way of getting down. He told us that we should save a great round if we came past his store, situated on Makawe Hill, about seven miles off, and that as the road was bad he would lend us his oxen to help us. Accordingly we started, going up and down hill in some places with such steep sidlings that we had to support the vehicle with rheims. Makawe Hill commands an extensive view of St. Lucia Lake and the surrounding country. We stayed here a few days, but were troubled most of the time by disagreeably cold north winds, from which there was little or no shelter to be had.

At last the first week in June we descended to the flats and outspanned under a spreading mimosa-tree. We saw large flocks of Guinea-fowl, and shot a few, but without a pointer they are hard to get. The eggs are sometimes taken and hatched under a hen: we saw some well-grown birds at a kraal raised in this way. "Paauw" are common here on the open grass, as we have seen as many as 18 in a day. The Great Bustard, or "Paauw" (*Otis kori*), can run with great speed, making use of its wings, like the Ostrich, but, unlike the latter, can also fly well. Although the Paauw has been often tamed, we have never heard of its breeding in confinement; but as it becomes so tame there does not seem any reason why it should not, and it would then be a valuable addition to the poultry-yard. When living on the south coast we reared one of these birds and

kept it tame for some time ; but when about half-grown it was unfortunately killed by some Carrion-Crows, who tore it to pieces. Although the flesh of this Bustard is good eating, many of the Boers in the Transvaal have a prejudice against it and will not touch it.

The "Koran" or "Knorhaan" (*Otis afra*) is not so gregarious as the Paauw, and is generally met with in pairs. We once obtained two unfledged young ones and reared them on minced meat and meal. One of them thrived well, but having a propensity for swallowing anything which came in its way, ultimately died from eating a piece of glass. The Secretary-bird (*Serpentarius secretarius*) seems to be very widely distributed. It can run with great swiftness, and it requires careful stalking to come up with it, as this bird is always on the alert, and, without using its wings, soon leaves the pursuer far behind. It has a very intelligent way of attacking snakes : it spreads out one of its wings as a shield whilst it seizes the prey in its beak, shaking it from side to side until it is stunned before attempting to swallow it. One that we shot here was 3 feet 3 inches in length, and had an expanse of wing of 6 feet. To judge by the contents of the stomach, it must be a very useful bird ; we found in it the remains of four snakes, several lizards, two rats, and a number of locusts. We have seen this bird in a state of domestication and so tame that, though allowed complete freedom, it would not leave the place, nor did it molest the poultry.

On the 27th of June we started on the backward-track, deciding to take the coast-route, and accordingly proceeded ten miles towards the Inpokenyoni district and outspanned on the veldt. Here we shot a "Dikkop" (*Ædicnemus capensis*), a large Plover and good eating. It has beautiful large yellow eyes. We went on through hilly country covered with scattered thorns, and crossed the Iluliluwe river at the high drift. This part of the country is very dry, and we had to trek for 15 miles after wading the stream before we could obtain water ; fever is prevalent in the summer. Here we collected a good deal of wild cotton, which is useful for stuffing birds. It is a creeping-plant and completely covers

some of the trees, giving them a snowy crown that is visible a long way off. We continued our journey over low hills and through ugly country till we came to the junction of the Hlabisa public road, near which are the St. Lucia coal-fields. A pretty deep shaft has been sunk and some good coal brought to the surface. No doubt this discovery will prove of great value when the projected railway through Zululand is made. At last, after proceeding some miles further, we reached the banks of the great river Umfolosi, where we found a good place to rest under a huge fig-tree. This drift is considerably below the junction of the Black and White divisions of this stream. At this time we had some difficulty in getting boys to work: the Zulu Kafirs are too well off and their wants too few for them readily to take to labour, and the offer of high wages often fails to tempt them. A transport waggon passing afforded us the help we needed, and crossing the river we were soon outspanned near Mr. Rodseth's Norwegian station. At his recommendation we decided to visit the locality called Umbonambi, near the sea. On July the 22nd we left these bare grassy hills, and gradually descended to the coast-flats by a track not very well defined. On the way we passed the Umango, a small wood of tall trees, mostly yellow-wood (*Podocarpus thunbergia*), and rested here awhile. Not finding many birds we continued on our way seawards and soon reached the line of sandy bush-covered hills that here skirt the shore. This turned out to be a very pretty part of the coast—steep sandy hills and deep valleys, dark with thick bush, extending for some miles, with the mouth of the Umfolosi in the distance. The “Hadadah” is common here, and by careful stalking we managed to secure several. The beautiful Yellow-billed Cuckoo, with its extraordinary cry, inhabits the thick scrub; Black-and-White Barbets (*Smilorhis leucotis*) perched on the higher branches of the taller trees, and there were plenty of fat green Pigeons, as well as Trogons and Klaas's Cuckoos. The natives grow a small species of German millet here, which is very hardy, but the grain is poor and husky. We shot a fine White Heron (*Herodias alba*), 3 feet long, and saw several of the Sacred Ibis. After remaining here a short

time we returned to the Umango and outspanned under the yellow-woods.

Trekking on and resting at mid-day on the banks of the Umsineni river near a fine pyramid-shaped mountain called "Umpomvu," that is conspicuous for many miles, we soon reached Mr. Maxwell's Magistracy, ten miles north of the Umhlatoosi river. This residency is situated amongst low hills, and is about 20 miles from F. Green's Ungoye store. After spending a pleasant Sunday here, we proceeded on our way and crossed the Umhlatoosi, where there is a small store and a number of fan-palms. A journey of 12 miles up and down hill, rather tiring for the oxen, brought us to Green's. Here we got bananas and vegetables and other acceptable provisions. This spot is 35 miles from the Tugela and 4 or 5 from the forest. Deciding to pay another visit to the Ungoye, we left the cart and oxen, and engaging bearers took our things to a good place in the woods and put up a tent, first taking the precaution to light a big fire to dry the ground. There is generally a good deal of wind in these elevated forests, and we found it useful to enclose our camp with a wattled fence. Though this was not the best season, we got a few birds, including some more specimens of our new Barbet, and admired the gambols of the pretty Ungoye squirrel. This seems a favourite resort of the large Black-and-White Hornbill (*Buceros buccinator*); in no part of Zululand have we seen so many. It is a wild, shy bird, and keeps to the tops of the trees, flying with great strength and speed. Its cry is loud and harsh, something like the mewing of a cat, and has a very complaining tone. In 1893 we reared one from the nest, and it became remarkably tame. It would follow us when we took long walks and alight on our shoulders to rest, and when we went out riding would accompany the horse for miles, flying round in circles, and perch in the trees along the road. The unwieldy-looking double bill of these birds does not seem to incommode them, as, although strong, it is composed of light porous tissue. The Red-billed Hornbill (*Toccus melanoleucus*) is common here, as it is in most places. It is naturally half tame, and will allow one to approach within a yard or two without

stirring; on being disturbed it floats rather than flies to another tree, uttering its loud shrill cry of "he he he-he-he." It is omnivorous, and feeds largely upon caterpillars and locusts as well as fruit. On account of the length of its bill it has a curious way of feeding: it first takes the object into its bill, and then, by jerking the head backwards, throws it fairly into its throat. It visits the gardens in the winter and eats a quantity of bananas and tomatoes. We constantly saw parties of five or six of the Ground Hornbill (*Bucorvus abyssinicus*) dotted over the bare hills outside the forest. It is a ground-bird, very large and heavy, and instead of hopping, like the Tree Hornbills, walks well, and when aroused takes a short run and flies some distance before again alighting. It is all black, except the white primaries, which are only seen when it is flying. Its voice has a booming sound and can be heard a long distance. It is often heard crying before rain, from which the natives think it has the power of bringing rain; they are very superstitious regarding this bird, and believe that if one is killed near their kraals some misfortune will be sure to happen. We once found a nest of a pair of these birds; it was built of sticks in a large tree standing by itself. In it were two young ones, one of which we reared and had for a long time tame. It had a voracious appetite, which nothing seemed able to appease, and at last we had to part with it, as it took to destroying poultry, swallowing the young chickens whole! This Hornbill is very useful in destroying snakes; fortunately it is one of the few birds protected by law. We obtained from the same nest a specimen of their eggs; the shell is very strong, of a dull white colour, and as large as that of a Goose.

On the 4th September we resumed our cart and trekked on to the Inlalaas, and from there over ugly country to the Umbezani. Journeying on for seven hours over country nearly level, we arrived at the Inyoni district, where there is a good store. Three and a half hours brought us to the Tugela, and with the help of extra oxen we crossed over into the land of civilization again.

[To be continued.]